

CHILOPODS

OF THE WILLIAMS GALAPAGOS EXPEDITION

BY RALPH V. CHAMBERLIN

(Plate VI, figs. 1-4)

This expedition, initiated and financed by Mr. Harrison Williams, was sent out under the auspices of the Department of Tropical Research of the New York Zoological Society. While but few centipedes were secured by Mr. William Beebe and his associates on this expedition, these represent two of the three species previously recorded from this archipelago, and, in addition, two new species, one of which typifies a new genus in the family Schendylidae. Thus the number of species now known from these islands is raised to five. Four of these species are indigenous.

In a previous paper (Psyche, 1914, 21, p. 85) the writer erroneously listed, among species from the Galapagos Islands, *Cryptops navigans* Chamberlin and *Mecistocephalus parvus* Chamberlin; but these forms were, in fact, taken on Clipperton Island, which lies fifteen hundred miles north-west of the Galapagos group.

The only one of the five species not represented in the present collection is *Orphnaeus brevilabiatus* (Newport). This is a very common geophiloid throughout the warmer parts of both hemispheres. One specimen of it was taken on Hood Island by the Stanford Expedition of 1898-99.

The types of new species are in the Department of Tropical Research of the New York Zoological Society.

Family CRYPTOPIDAE

Cryptops beebei, sp. nov. .

General color yellowish.

Head with sides subparallel over the middle portion. Without paired sulci.

First dorsal plate with a cervical sulcus which is angularly bent back at the middle. Paired longitudinal sulci extend from caudal margin to the cervical sulcus. Each longitudinal sulcus is furcate at its anterior end.

Paired sulci present on the second and subsequent tergites. Last plate with a median longitudinal depression which does not extend to the caudal angle.

Prosternum not punctate or distinctly furrowed. Anterior margin convex; bearing 4 + 4 setae of which the ectal on each side is reduced or may

First form on press April 28, 1924.

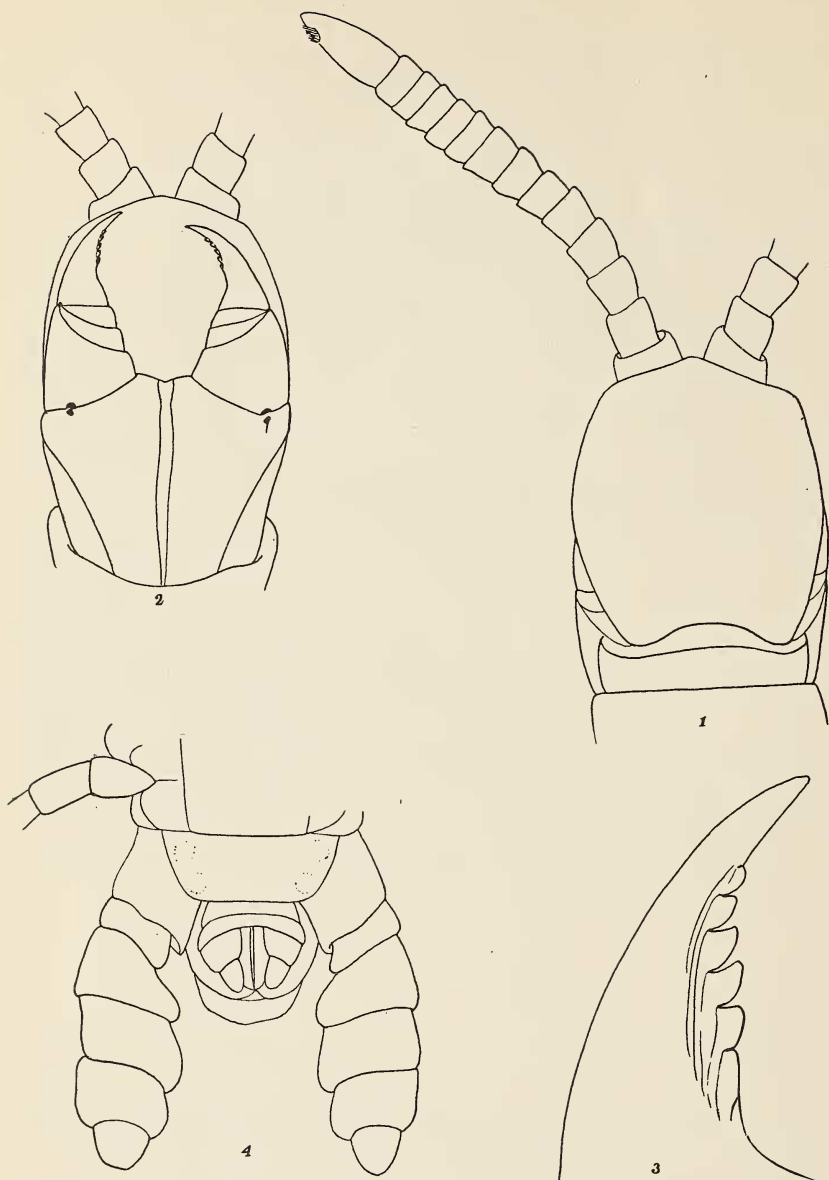


PLATE VI. *NANNODELLUS PURPURASCENS*, sp. nov.

1, anterior end, dorsal view; 2, prehensors, ventral view; 3, claw of right prehensor, ventral view, more highly enlarged; 4, caudal end, ventral view.

be indicated only by the basal nodule. A little caudad of the anterior margin are in addition 2 + 2 bristles. Elsewhere the setae are short and sparse.

Ventral plates smooth, not punctate. Last ventral plate trapeziform, the sides convex, more strongly rounded toward and about the posterior corners; caudal margin a little convex.

Coxopleurae caudally subtruncate.

Spiracles moderate, in part a little longitudinally elliptic.

Tarsi of anterior legs uniarticulate.

Third joint of last legs armed ventrally and laterally with numerous spines and spinescent setae of which the ventral ones are stouter; ventral surface with a median longitudinal space free from spines. Fourth joint with similar but fewer spines and with a similar spine-free median space. Fifth joint (tibia) with a series of four ventral teeth. The sixth joint with two ventral teeth. Ultimate joint bearing only setae.

Length, 16 mm.

Locality.—Tower Id. Two specimens taken 28 April, 1923.

In characters of the anal legs this species resembles *Cryptops navigans* Chamberlin of Clipperton Id. From that species, however, it is readily distinguished in having paired sulci on the first as well as on the second tergites, in having setae on the anterior margin of the prosternum, etc. The present species is named for Mr. William Beebe, leader of the expedition, by which the types were secured.

Family SCOLOPENDRIDAE

Scolopendra galapagoensis Bollman

Proc. U. S. Nat. Mus., 1889, 12, p. 214.

Scolopendra galapagoensis Chamberlin

Psyche, 1914, p. 86.

In the stomach of a Galapagos hawk, *Buteo galapagensis*, shot on South Seymour, April 19th, 1923, were found the well-preserved posterior portions of five specimens of this large centiped. Heads and anterior segments were missing. From a second hawk, killed at the same place and on the same date, fragments of two other individuals of this centiped were removed. In this case the head end of one specimen is present and entire, while of the second specimen the head proper is missing although the poison-jaws are present. Fragments, including head of another specimen of the same species, were found in the stomach of a short-eared owl, *Asio galapagensis*, taken April 28th, 1923 on Tower Id.

This species would seem to be the most abundant, or at least certainly the most conspicuous, chilopod of the Galapagos Is. It was previously recorded from Hood, Chatham, Bindloe, Narborough, and Albemarle Islands.

Family SCHENDYLIDAE

Pectiniunguis albemarlensis Chamberlin

Pectiniunguis americanus Chamberlin (nec Bollman)

Ent. News, 1913, p. 122.

Pectiniunguis albemarlensis Chamberlin

Psyche, 1914, 21, p. 86; *Proc. Cal. Acad. Sci.*, 1923, ser. 4, 13, p. 394, f. 3.

This species was based upon a single female specimen with 61 pairs of legs which was taken upon Albemarle Id. by R. E. Snodgrass while a member of the Stanford Galapagos Expedition of 1898-'99. Two additional specimens were taken on Tower Id. by the Williams Expedition on the 18 and 27 April, 1923, respectively. These are likewise females. One, with sixty-one pairs of legs, has the prebasal plate exposed and the coloration normal. It is 62 mm. long. The other individual has 65 pairs of legs and has the prebasal plate covered, apparently by artificial retraction of the cephalic plate in the alcohol. The cephalic plate is somewhat differently shaped and the antennae are shorter. The geminate black dorsal stripe is absent or only vaguely indicated in the posterior region. It is 45 mm. long.

Nannopodellus, gen. nov.

Mandibles with a dentate lamella which is typically tripartite.

Labrum pectinate at sides, truly dentate(?) at middle.

Claw of the palpi of the second maxillae with margins pectinate.

Sternites without pore-areas.

Coxopleurae of last legs each with two homogeneous glands.

Anal legs six-jointed; without claws.

Genotype.—*N. purpurascens* sp. nov.

Related to *Nannophilus* in general features, but different in the absence of ventral pores on the sternites. It is at present impossible to say just what relationship the present form bears to the several South American species placed by Silvestri in the genus *Nannophilus*, though it is quite possible they are congeneric. The species clearly referable to *Nannophilus* have been found in the Mediterranean region.

Nannopodellus purpurascens, sp. nov.

(Plate VI, figs. 1-4)

The general ground color is yellowish, but the body is conspicuously marked throughout its length above, below and laterally with numerous purplish marks and dots which tend to form longitudinal stripes.

The head shows no frontal suture. It is longer than wide in the ratio 8 : 7, and is widest at middle of its length. Caudal margin incurved. Anterior margin obtusely angular. (fig. 1.)

Antennae 1.8 times as long as the cephalic plate. The ultimate article as long as, or longer than, the three preceding articles taken together. (fig. 1.)

Prebasal plate exposed.

Basal plate very short, its exposed area rather more than five times as wide as long. (fig. 1.)

Claws of prehensors when closed not attaining front margin of head; unarmed at base but serrate along mesal side of middle portion as shown in figs. 2 and 3. Proximal joints of prehensors unarmed. Prosternum as exposed a little wider than long, without definite chitinous lines.

The last ventral plate very wide; covering the coxal pores on each side. Pores evident only after special clearing of the specimen. (See further, fig. 4.)

Anal legs of male very stout. (fig. 4.)

Pairs of legs in the male, fifty-three.

Length, about 16 mm.

Locality.—South Seymour Id., 20 April, 1923.

One male which is in poorly preserved condition.

This is one of the series of scientific papers of the Harrison Williams Galapagos Expedition, under the directorship of William Beebe, sent out by the Department of Tropical Research of the New York Zoological Society. The general account and narrative of the expedition, together with the natural history and photographs of the fauna, are embodied in a *f*folume by William Beebe, published by G. P. Putnam's Sons, under the auspices of the Zoological Society. Its title is "Galapagos; World's End."